MINUTES OF THE MARICOPA ASSOCIATION OF GOVERNMENTS WATER QUALITY ADVISORY COMMITTEE MEETING

Tuesday, February 7, 2006 MAG Office Building Phoenix, Arizona

MEMBERS ATTENDING

Roger Klingler, Scottsdale, Chair

*Avondale: Greg Stack
Buckeye: Lucky Roberts
#Chandler: Jacqueline Strong
El Mirage: Michael Salisbury

*Gilbert: Lonnie Frost Glendale: Chris Ochs Goodyear: David Iwanski

Goodyear: David Iwanski #Mesa: Bill Haney

Peoria: William Mattingly for Stephen Bontrager

Phoenix: Robert Hollander Surprise: Rich Williams Sr. Tempe: David McNeil

Maricopa County: Ken James for John

Power

Pinnacle West Capital: John Boyer *Salt River Project: Ray Hedrick

U of A Cooperative Extension: Patrick Clay *Citizen Representative: Eugene Jensen

#Attended by telephone conference call.

OTHERS PRESENT

Kennedy/Jenks: Ron Frey Kennedy/Jenks: Fred Goldman CSA Engineering: John Tyldesley CSA Engineering: Peter Chan JF Properties: Keith Watkins JF Properties: Jim Condit Beus Gilbert: Paul Gilbert MAR-Wood, Inc: Don Gorny

Arizona Department of Environmental Quality:

Michele Robertson

Arizona Department of Environmental Quality:

Edwina Vogan

Smith Consultants: Steve Smith

Speyer & Associates, P.C.: Steve Speyer ESCA Environmental: Gene Cetwinski Charles Civer Real Estate: Charles Civer Glennie Reporting Services: Janet Hauck Maricopa Association of Governments:

Julie Hoffman

Maricopa Association of Governments: Ann

Wimmer

1. Call to Order

A meeting of the MAG Water Quality Advisory Committee was conducted on Tuesday, February 7, 2006. Robert Hollander, City of Phoenix, Acting Chair, called the meeting to order at 2:05 p.m. Jacqueline Strong, City of Chandler, and Bill Haney, City of Mesa, attended the meeting via telephone conference call.

^{*}Those members neither present nor represented by proxy.

2. Agenda Announcements

Roger Klingler, City of Scottsdale, Chair, provided an opportunity for member agencies to report on activities of interest in their agencies.

3. <u>Call to the Audience</u>

Chair Klingler provided an opportunity for members of the public to address the Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG or items on the agenda for discussion but not for action. No members of the public indicated that they wished to address the Committee.

4. Approval of the December 13, 2005 Meeting Minutes

The Committee reviewed the draft minutes from the December 13, 2005 meeting. Chris Ochs, City of Glendale, moved and David Iwanski, City of Goodyear, seconded, and the motion to approve the December 13, 2005 meeting minutes carried unanimously.

5. Public Hearing - Draft MAG 208 Water Quality Management Plan Amendments for the Town of Buckeye Trillium West Wastewater Treatment Facility and Town of Buckeye Palo Verde Road Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System Permit Discharge to the Roosevelt Irrigation District Canal

Chair Klingler opened the Public Hearing on the Draft MAG 208 Water Quality Management Plan Amendments for the Town of Buckeye Trillium West Wastewater Treatment Facility and Town of Buckeye Palo Verde Road Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System (AZPDES) Permit Discharge to the Roosevelt Irrigation District Canal. He indicated that the hearing would begin with a briefing on the projects, followed by an opportunity for hearing participants to make comments on the draft 208 plan amendments for the public record. He added that a Court Reporter was present to provide an official record of the hearing and written comments are also welcome. Chair Klingler invited members of the public wishing to provide comments to fill out a yellow card and submit it to MAG staff.

Paul Gilbert, Beus Gilbert, provided a brief overview for the Draft MAG 208 Water Quality Management Plan Amendment for the Town of Buckeye Trillium West Wastewater Treatment Facility. He discussed the ownership, operation, and financing for the facility and mentioned the size and location of the Trillium West Development. Mr. Gilbert stated that the Trillium West Wastewater Treatment Facility would be the first phase of a 20 year regional solution within the Sun Valley Community Plan. He added that additional land at the facility site is available in the event the Trillium West Facility becomes a regional plant, up to a capacity of 11 million gallons per day (mgd). He mentioned that by 2026, the estimated population for the Trillium Project Service Area will be approximately 25,500.

Peter Chan, CSA Engineering, presented the design of the Trillium West Wastewater Treatment Facility. He indicated that Phase I would be a Sequential Batch Reactor (SBR) System. For Phases 2, 3, and 4, the SBR System would be converted to a Modified Ludzack-Ettinger Process. Mr. Chan

added that effluent from the facility would meet ADEQ Title 18 Class A+ Effluent Standards and sludge would meet EPA Class B biosolids. He discussed the water quality standards and provided a list of required permits. Mr. Gilbert provided an anticipated project schedule for the design, construction, and start-up of the plant and mentioned the methods of effluent disposal.

Fred Goldman, Kennedy/Jenks Consultants, provided an overview of the Draft 208 Water Quality Management Plan Amendment for the Town of Buckeye Palo Verde Road Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System Permit Discharge to the Roosevelt Irrigation District Canal. He indicated that the facility is identified in the current MAG 208 Plan with an ultimate capacity of 10.2 mgd and reclaimed water being disposed of through reuse, recharge, and AZPDES Permit discharges to the Buckeye Water Conservation and Drainage District Canal for reuse and the Hassayampa River. This amendment would identify an additional AZPDES Permit discharge for the Palo Verde Road Wastewater Treatment Plant to accommodate future effluent discharges into the Roosevelt Irrigation District Canal for reuse. Mr. Goldman provided a map of the AZPDES discharge points and discussed the required permits.

Chair Klingler provided an opportunity for Committee questions regarding the projects. He also stated that members of the public wishing to speak should fill out a card and submit it to MAG staff. He noted that no public comment cards had been received. Chair Klingler closed the public hearing and requested that the Court Reporter end the transcription.

6. <u>Draft MAG 208 Water Quality Management Plan Amendment for the Town of Buckeye Trillium West Wastewater Treatment Facility</u>

Chair Klingler provided an opportunity for questions from the Committee and indicated that the Committee is requested to recommend approval of the Draft MAG 208 Water Quality Management Plan Amendment for the Town of Buckeye Trillium West Wastewater Treatment Facility. Lucky Roberts, Town of Buckeye, moved to recommend approval of the Draft Buckeye Trillium West 208 Amendment. Rich Williams, City of Surprise, seconded and it was unanimously passed through a roll call vote by the Committee.

7. <u>Draft MAG 208 Water Quality Management Plan Amendment for the Town of Buckeye Palo Verde Road Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System Permit Discharge to the Roosevelt Irrigation District Canal</u>

Chair Klingler provided an opportunity for questions from the Committee and indicated that the Committee is requested to recommend approval of the Draft MAG 208 Water Quality Management Plan Amendment for the Town of Buckeye Palo Verde Road Wastewater Treatment Plant Arizona Pollutant Discharge Elimination System Permit Discharge to the Roosevelt Irrigation District Canal. Mr. Hollander moved to recommend approval of the Draft Buckeye Palo Verde Road 208 Amendment. Mr. Ochs seconded and it was unanimously passed through a roll call vote by the Committee.

8. <u>Draft Small Plant Review and Approval for the Proposed City of Peoria Estates at Lakeside</u>
Wastewater Treatment Plant

Gene Cetwinski, ESCA Environmental, provided an overview of the Draft Small Plan Review and Approval for the proposed City of Peoria Estates at Lakeside Wastewater Treatment Plant. Mr.

Cetwinski described the location of the Estates at Lakeside Development and the wastewater treatment plant. He stated that a native plant inventory has been completed and that the developer will work with the City of Peoria to utilize the vegetation. Mr. Cetwinski indicated that, due to the rugged terrain, six pumping stations will be used to carry the sewage to the wastewater treatment plant. Phase I of the development would be located at the northwest corner of the intersection of Highway 74 (Carefree Highway) and Old Lake Pleasant Road. Phase II would be located approximately one-half mile northwest of Phase I. The facility would be located south of Highway 74 and have a capacity of 60,000 gallons per day for each phase for an ultimate capacity of 120,000 gallons per day. Effluent would be disposed of through deep well injection into the aquifer. Don Gorny, MAR-Wood, Inc., discussed the activated sludge treatment process for the wastewater treatment plant and indicated that it is similar to what is used for larger facilities.

Mr. Williams asked if the plant would be a prepackaged system. Mr. Gorny responded that MAR-Wood has been a local manufacturer since 1988. The plant would be a prepackaged system and constructed using precast concrete. Mr. Iwanski asked if there would be redundancy in terms of capacity for deep well injection of effluent. Mr. Cetwinski replied that primary and secondary would be capable of 100 percent flow. He added that there would be point-of-compliance and testing wells.

Steve Speyer, Speyer & Associates, Inc., discussed the geology and hydrogeology for the Estates at Lakeside site. He provided a map showing the location of the underground storage facility and presented the injection well sites and the makeup of the surrounding ground. He discussed the groundwater elevation data and results of the well pumping test. Mr. Speyer also gave an overview of the following: the 72-hour pump test of the aquifer, pneumatic test of unsaturated zone, Analytical Model-predict mounding at well, MODFLOW Model-calculate regional impact on water table, and the Regional Analytical Model-for purposes of comparison.

Steve Smith, Smith Consultants, discussed the following: Field Test Results, Analytical Model, MODFLOW Model, and Regional Models. He stated that the Arizona Department of Water Resources determined the technical components of the Underground Storage Facility Application to be complete and acceptable.

Chair Klingler inquired about the ultimate size of the development. Mr. Cetwinski responded that Phases I and II will each consist of 166 lots. Chair Klingler asked how the phases would be connected. Mr. Cetwinski replied that Phase II has not been designed, but will require a pump station to connect to Phase I. Chair Klingler inquired about other developments in the area. William Mattingly, City of Peoria, responded that no other developments are moving forward at this time in the surrounding area. He stated that the facility is being designed as permanent plant; however, the City of Peoria would like to have the facility decommissioned when there is a regional solution available. Mr. Mattingly added that Peoria has recently procured the water and wastewater company in that area. He mentioned that the facility may become a lift station site once flows could be sent to a regional facility.

Chair Klingler commented on the terrain and asked if there is a lot of private property in the area. Mr. Cetwinski replied that there is very little. John Boyer, Pinnacle West Capital, inquired about the source of drinking water. Mr. Cetwinski responded that Lake Pleasant Water Company has one well to the east of the Estates at Lakeside Development and will be adding another.

Mr. Hollander commented on the groundwater level and asked if a reversal in the direction of groundwater is expected as a result of mounding. Mr. Speyer replied that the water will not go as far north because of the southwest trajectory. He discussed the hydraulic conductivity to the east with the Agua Fria Channel. Mr. Smith stated that there would be a small area of flow reversal to the north, but it will not extend further than a couple hundred yards. He added that the mound does extend further. Mr. Speyer added that the model is looking out 20 years and is based on a gravity feed.

Mr. Hollander commented on the number of lift stations. Mr. Mattingly stated that the City of Peoria looked at ways to minimize the number of lift stations. He discussed an earlier proposal to use a grinder-pump system; however, Peoria was not interested in pursing the option. He stated that the City compromised with having community/public lift stations. Mr. Mattingly added that lift stations are necessary for this development to proceed.

Mr. Hollander commented that the number of lots planned for the development, as presented, is inconsistent with the number given in the *Analysis of Alternative Effluent Disposal Options*. Mr. Cetwinski stated that the initial analysis estimated 200 lots for each phase. Due to the terrain and drainage, the number of lots was revised to 166 for each phase.

Mr. Williams commented on the loadings given for BOD, suspended solids, and nitrogen levels. Mr. Cetwinski stated that the pump stations would have both low and high level pumping capabilities and that there is flow equalization at the wastewater treatment plant.

Ken James, Maricopa County, commented on the cost of constructing the plant and the assets held by Lake Pleasant Sewer Company. He asked how the difference would be reconciled. Charles Civer, Charles Civer Real Estate, replied that Lake Pleasant Sewer Company is owned by DLGC, which has a net worth in excess of \$30 million.

Chair Klingler inquired about the size and cost of the lots in the Estates at Lakeside Development. Mr. Civer replied that the average lot size is 1.25 acres with a cost of \$400,000 to \$650,000 per lot. Mr. Iwanski moved to recommend approval of the proposed City of Peoria Estates at Lakeside Wastewater Treatment Plant as part of the MAG 208 Water Quality Management Plan. Mr. Mattingly seconded and it was unanimously passed through a roll call vote by the Committee.

9. <u>ADEQ Aquifer Protection Permit Rule Revisions</u>

Michele Robertson, Arizona Department of Environmental Quality, provided an overview of the 2005 Aquifer Protection Permit (APP) Rule Revisions. She discussed the new language related to nitrogen management areas including the criteria and designation process. She mentioned capacity, management, operations, and maintenance (CMOM) plans, the CAFO Agricultural General Permit, and the requirements for pre-sale inspections. She briefly discussed other APP Rule revisions and indicated that ADEQ will not make an APP compliance determination until there is a 208 consistency determination. Ms. Robertson discussed the changes to the Best Available Demonstrated Control Technologies (BADCT) for sewage treatment facilities and provided a contact for additional information.

Chair Klingler inquired about the requirement of noise to be less than 50 decibels at the property boundary for sewage treatment facilities Ms. Robertson responded that ADEQ took an average from

the Arizona Department of Transportation and other states to arrive at 50 decibels. Chair Klingler inquired about the section on nitrogen management areas being dropped in the 2001 Rule. Ms. Robertson responded that the section was removed from the 2001 Rule, but has been included as part of the 2005 APP Rule Revisions.

Mr. Hollander inquired about the nitrogen management area designation process. Ms. Robertson responded that ADEQ would issue a proposed designation and then reach out to the community and city for comment.

David McNeil, City of Tempe, inquired about how noise and odor requirements for sewage treatment facilities would be enforced. Ms. Robertson replied that the requirements will be complaint driven. Mr. McNeil asked about the e. coli monitoring option. Ms. Robertson responded that an amendment to the permit would be necessary. Mr. McNeil inquired about the Notice of Intent Permit under the CMOM Plans. Ms. Robertson replied that the CMOM Plan must be in place at the time the Notice of Intent Permit is filed. She added that the Plan does not have to be submitted, just the Notice of Intent with a certification statement that the Plan is in place.

Chair Klingler thanked the Committee for participating and called for adjournment of the meeting.